

UNIFIED LOSSY AND LOSSLESS AUDIO COMPRESSION

ABSTRACT

A unified lossy and lossless audio compression scheme combines lossy and lossless audio compression within a same audio signal. This approach employs mixed lossless coding of a transition frame between lossy and lossless coding frames to produce seamless transitions. The mixed lossless coding performs a lapped transform and inverse lapped transform to produce an appropriately windowed and folded pseudo-time domain frame, which can then be losslessly coded. The mixed lossless coding also can be applied for frames that exhibit poor lossy compression performance.